

REMARKS/ARGUMENTS

This Amendment is being filed in response to the Final Office Action dated April 23, 2009 and the Advisory Action of July 13, 2009. Reconsideration and allowance of the application in view of the amendments made above and the remarks to follow are respectfully requested.

Claims 1-5, 9-17 and 19 are pending in the Application.

The Applicants appreciate the indication contained in the Advisory Action that the rejections contained in the Final Office under 35 U.S.C. §112, first paragraph are withdrawn.

In the Final Office Action, claims 1-4, 8, 9-16 and 19 are rejected under 35 U.S.C. §103(a) over U.S. Patent No. 5,390,432 to Boulud ("Boulud I") in view of U.S. Patent No. 3,551,183 to Vondracek ("Vondracek"). Further, claims 1, 2, 5, 8-11, 16, 17 and 19 are rejected under 35 U.S.C. §103(a) over U.S. Patent No. 6,684,539 to Boulud et al ("Boulud II") in view of U.S. Patent No. 5,060,406 to Verweij ("Verweij"). This rejection is maintained in the Advisory Action. The rejections are respectfully traversed. It is respectfully submitted that claims 1-5, 9-17 and 19 are allowable over the cited references for at least the following

reasons.

It is undisputed that Boulud I and Boulud II fail to disclose or suggest "wherein the second layer comprises inorganic particles, and wherein the inorganic particles include clay particles or  $\text{Al}_2\text{O}_3$  particles" as recited in claim 1. See, Final Office Action, page 4 and page 7 continuing to page 8.

Each of Vondracek and Verweij are cited to cure the deficiencies in each of Boulud I and Boulud II, however, it is respectfully submitted that reliance on either of Vondracek and Verweij is misplaced.

It is respectfully submitted Boulud I in view of Vondracek and Boulud II in view of Verweij does not disclose or suggest, a coating for an interior surface of a steam-generating device that amongst other patentable elements, comprises (illustrative emphasis provided) "a first layer deposited on the interior surface of the steam-generating device and a second layer deposited over the first layer, wherein the first layer is essentially impermeable to water and is thermally insulating and the second layer is hydrophilic, wherein the second layer comprises inorganic particles, and wherein

the inorganic particles include clay particles or Al<sub>2</sub>O<sub>3</sub> particles"  
as recited in independent claim 1.

The Final Office Action states that "[i]t would have been obvious to a routineer in the art to add alumina to the sodium silicate second coating of Bouloud [I], in order to increase the strength of the coatings and to decrease water solubility, and in the case of clays, to aid in the deposition of coating sodium silicate as is known in the art." Vondracek is cited in support of this position on page 4 of the Final Office Action and Verweij is cited in support of this position on page 8 of the Final Office Action.

However, both Vondracek and Verweij describe a single layer for a steam iron and not a second layer that is deposited over a first layer that is essentially impermeable to water and is thermally insulating as recited in the claims.

As a person of ordinary skill in the art of layer deposition would readily appreciate, a teaching of depositing a layer onto a chamber surface as taught by Vondracek (see, Vondracek, Col. 3, lines 32-34) or a applying of a layer to an aluminum steam chamber as taught by Verweij (see, Verweij, Col. 3, lines 31-32) can not be

readily applied to an application of that same layer over another layer that is comprised of a different material than the chamber surface.

It is respectfully submitted that one would not be motivated by the teachings of the references, such as Verweij which describes that (emphasis added) "the mutual bond of the suspension particles and the adherence to the aluminum bottom of the steam chamber are enhanced because the acid  $H_2PO_4^{2-}$  ions react both with metals and oxides until stable" to overlies this layer over other than the aluminum steam chamber since clearly, no such benefit would be derived if the layers of Vondracek or Verweij were applied over a further layer.

Accordingly, the motivation cited in the Final Office Action, namely to increase strength in the coating is not achieved when the coating is applied over a further coating.

The Advisory Action takes a position that the Applicants counsel is providing an assertion that is "not supported by evidence or fact" and further states that "the arguments of counsel cannot take the place of evidence in the record" (see, Advisory Action, bottom of page 2). Further, the Advisory Action concludes

that "[i]t is the examiner's position that the arguments provided by the applicant regarding this argument must be supported by a declaration or affidavit." However, the Applicants submit that the arguments provided with regard to the properties of the coatings are not being provided by the Applicants representative, in which case a requirement for a declaration would be in order, but are in fact provided by the cited references themselves.

For example, it is not the Applicants' assertions but Verweij directly that teaches that the mutual bond of the suspension particles of the coating and the adherence to the aluminum bottom of the steam chamber are enhanced because the acid  $\text{H}_2\text{PO}_4^{2-}$  ions react both with metals and oxides until stable.

The Applicants representative merely is pointing out that which is taught by the reference directly, that the benefit of the coating of Verweij is provided only when the coating is applied directly to the aluminum bottom of the steam chamber as stated directly by Verweij. Accordingly, a person of ordinary skill in the art would not be motivated by Verweij to apply this coating over another layer that overcoats the aluminum bottom of the steam chamber of Verweij.

Further, the Final Office Action states that "Verweij is used as a teaching reference to show that phosphate acid treatments may comprise silica or alumina particles, thereby establishing a functional equivalency between silica particles and alumina particles." The Advisory Action maintains this position on page 5.

However, it is respectfully submitted that Verweij does not establish any such equivalency and in fact states that (emphasis added) "[t]he known steam chamber coating [composed of a silicate layer] exhibited a strong degree of flaking after the test whereas the steam chamber coating according to the invention [of Verweij wherein alumina particles are bonded directly to the steam chamber] was unaffected." (See, Verweij, Col. 3, lines 40-52, Col. 4, lines 10-15 and lines 23-26.)

Accordingly, in contrast with the assertion provided in the Final Office Action and maintained in the Advisory Action, Verweij provides no support that silica or alumina particles are functional equivalents and as such, does not support the allegation provided in the Final Office Action and maintained in the Advisory Action.

In fact, Verweij itself directly disputes this position since as quoted directly from Verweij, the coating composed of a silicate

layer exhibited a strong degree of flaking while the coating of alumina particles bonded directly to the steam chamber was unaffected (see quotes and references to Verweij discussed above).

Regarding the position provided in the Advisory Action, namely that "Vondracek ... teaches a certain concept, namely that alumina particles may be added to sodium silicate coatings in order to increase strength (col. 3, lines 1-46), and furthermore that colloidal clays may be added to sodium silicate in order to aid in deposition (col. 4, lines 19-24), and in combination with the primary reference, discloses the presently claimed invention" (see, Advisory Action, page 3), this position is respectfully refuted since Vondracek is clear that the benefits are provided "by adding hydrated alumina to the sodium silicate solution that is sprayed or otherwise deposited onto the surface of the chamber." (See, Vondracek, Col. 2, lines 59-62.)

The Final Office Action also states that "Applicant never argues the Examiner's position on the combination of the references and, accordingly, has failed to demonstrate patentability of the present claims." (See, Final Office Action, page 11.)

This position is respectfully refuted. The Applicants in fact dispute the references in combination as provided in the Final Office Action and the Advisory Action, however, address what the Final Office Action alleges is taught by the references individually to dispute the conclusions of the Final Office Action. The Applicants never argue that each of the references do not show each of the features of the claims since the rejection in the Final Office Action is clearly based on the combination of references.

Nonetheless, it is respectfully submitted that neither of the combination of Boulud I in view of Vondracek nor Boulud II in view of Verweij disclose or suggest, a coating for an interior surface of a steam-generating device that amongst other patentable elements, comprises (illustrative emphasis provided) "a first layer deposited on the interior surface of the steam-generating device and a second layer deposited over the first layer, wherein the first layer is essentially impermeable to water and is thermally insulating and the second layer is hydrophilic, wherein the second layer comprises inorganic particles, and wherein the inorganic particles include clay particles or Al<sub>2</sub>O<sub>3</sub> particles" as recited in claim 1.

In fact, both of Vondracek and Verweij cited in the Final Office Action teach deposition of a layer directly on the interior surface of the steam generating device and not as a second layer. In fact, each of the references are clear that the benefits as described by each of the layers of Vondracek and Verweij are derived by depositing those layers on the steam chamber directly.

Further, neither of Vondracek nor Verweij teach that the materials of the second layer of either of Boulud I or Boulud II are functionally equivalent to the layer of Vondracek and Verweij, and therefore, it is respectfully submitted that the substitution suggested by the Final Office Action may only be arrived at through a use of impermissible hindsight reconstruction which is strictly prohibited. Clearly, neither of Vondracek and Verweij provide any showing that the respective layers provide any benefits other than those derived by depositing the layers directly to the steam chamber.

Further, it is respectfully submitted that Boulud I in view of Vondracek and Boulud II in view of Verweij does not disclose or suggest, a coating for an interior surface of a steam-generating device that amongst other patentable elements, comprises

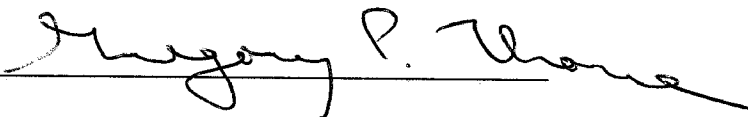
(illustrative emphasis provided) "a first layer deposited on the interior surface of the steam-generating device and a second layer deposited over the first layer, wherein the first layer is essentially impermeable to water and is thermally insulating and the second layer is hydrophilic, wherein a composition of the first layer and the second layer is similar yet have different binder to filler ratios or have different filler particle sizes for each of the first and second layers" as recited in claim 12 and as similarly recited in claim 15.

Based on the foregoing, Applicants respectfully submit that independent claims 1, 12 and 15 are allowable over Boulud I in view of Vondracek and Boulud II in view of Verweij, and notice to this effect is earnestly solicited. Claims 2, 4-5, and 9-11 depend from claim 1, claims 13 and 14 depend from claim 12, and claims 16, 17 and 19 depend from claim 15 and, accordingly, are allowable over the cited art of record for at least the same reasons as claims 1, 12 and 15, as well as for the separately patentable elements contained in each of the claims. Accordingly, separate consideration of each of the dependent claims is respectfully requested.

In addition, Applicants deny any statement, position or averment of the Examiner that is not specifically addressed by the foregoing argument and response. Any rejections and/or points of argument not addressed would appear to be moot in view of the presented remarks. However, the Applicants reserve the right to submit further arguments in support of the above stated position, should that become necessary. No arguments are waived and none of the Examiner's statements are conceded.

Applicants have made a diligent and sincere effort to place this application in condition for immediate allowance and notice to this effect is earnestly solicited.

Respectfully submitted,

By 

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